Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims:

- 1. (currently amended) A fuel cell system comprising:
 - (a) a fuel cell having an oxidant inlet; and
 - (b) a filter assembly comprising:
 - (i) an inlet configured to receive a dirty oxidant stream having gas phase contaminants;
 - (ii) a filter element adapted to remove the gas phase contaminants from the dirty oxidant stream received through the inlet, to provide a cleaned oxidant stream; the filter element comprising:
 - (A) a first adsorbent material and a second adsorbent material different than the first adsorbent material; and
 - (B) a particulate filter positioned downstream of the adsorbent material; and
 - (iii) an outlet configured for connection to the fuel cell oxidant inlet, through which the cleaned oxidant stream passes to the fuel cell.
- 2. (currently amended) The fuel cell system according to claim 1, wherein the filter element comprises first adsorbent material and the second adsorbent material are selected from the group consisting of activated carbon, impregnated carbon, activated carbon fibers, ion-exchange resin, ion-exchange fibers, alumina, activated alumina, molecular sieves, and silica.
- 3. (currently amended) The fuel cell system according to claim 2, wherein the filter element at least one of the first adsorbent material and the second adsorbent material comprises at least one solid mass of adsorbent material.

4

Serial No. 10/696,442 Amendment dated April 27, 2005 Reply to Office Action of Feb. 18, 2005

- 4. (currently amended) The fuel cell system according to claim 3, wherein the filter element at least one of the first adsorbent material and the second adsorbent material comprises extruded activated carbon.
- 5. (original) The fuel cell system according to claim 4, wherein the extruded activated carbon has a curved shape.
- 6. (currently amended) The fuel cell system according to claim 2, wherein the filter element at least one of the first adsorbent material and the second adsorbent material comprises granulated adsorbent material.
- 7. (currently amended) The fuel cell system according to claim 2, wherein the filter element at least one of the first adsorbent material and the second adsorbent material comprises a shaped adsorbent material.
- 8. (canceled)
- 9. (currently amended) The fuel cell system according to claim 1, wherein the filter element at least one of the first adsorbent material and the second adsorbent material is configured to remove any of methane, butane, propane, other hydrocarbons, ammonia, oxides of nitrogen, oxides of sulfur, carbon monoxide, and hydrogen sulfide.
- 10. (original) The fuel cell system according to claim 1, wherein the filter assembly system comprises a hydrophobic layer.
- 11. (canceled)
- 12. (currently amended) A filter assembly for use with a fuel cell, the filter assembly comprising:
 - (a) at least one inlet configured to receive a dirty gas stream;

Serial No. 10/696,442 Amendment dated April 27, 2005 Reply to Office Action of Feb. 18, 2005

- (b) an outlet adapted to be connected in communication with an oxidant inlet of a fuel cell;
- (c) a particulate filter;
- (d) a chemical filter comprising <u>a first carbon adsorbent material and a second</u> carbon adsorbent material, with the particulate filter positioned downstream of the adsorbent material;
- (e) the particulate and chemical filters being configured, in combination, to remove particulate and gas phase contaminates from the dirty gas stream and to provide a cleaned gas stream, suitable for use by a fuel cell, to the <u>assembly</u> outlet <u>and thus</u> the oxidant inlet of a fuel cell.
- 13. (currently amended) The filter assembly according to claim 12, wherein the carbon absorbent adsorbent material comprises impregnated carbon material.
- 14. (currently amended) The filter assembly according to claim 12, wherein the carbon absorbent adsorbent material comprises extruded activated carbon.
- 15. (original) The filter assembly according to claim 13, wherein the impregnated carbon material includes an acidic surface constructed and arranged to remove a basic contaminant, the basic contaminant being selected from the group consisting of ammonia, amines, amides, sodium hydroxides, lithium hydroxides, potassium hydroxides, volatile organic bases and nonvolatile organic bases.
- 16. (original) The filter assembly according to claim 13, wherein the impregnated carbon material includes a basic surface constructed and arranged to remove an acidic contaminant, the acidic contaminant being selected from the group consisting of sulfur oxides, nitrogen oxides, hydrogen sulfide, hydrogen chloride, and volatile organic acids and nonvolatile organic acids.

- 17. (currently amended) A fuel cell system comprising:
 - (a) a fuel cell having an oxidant inlet; and
 - (b) a filter assembly comprising:
 - (i) an inlet configured to receive a dirty oxidant stream having gas phase contaminants;
 - (ii) a filter element adapted to condition the dirty oxidant stream received through the inlet, to provide a cleaned oxidant stream with gas phase contaminants below a predetermined threshold limit; the filter element comprising:
 - (A) a first adsorbent material and a second adsorbent material different than the first; and
 - (B) a particulate filter downstream of the adsorbent material; and
 - (iii) an outlet configured for connection to the fuel cell oxidant inlet, through which the cleaned oxidant stream passes to the fuel cell.
- 18. (original) The fuel cell system according to claim 17, wherein the filter element releaseably captures the gas phase contaminants.
- 19. (original) The fuel cell system according to claim 17, wherein the filter element captures and permanently retains the gas phase contaminants.
- 20. (currently amended) A method of controlling contaminants within a gas stream to a gas inlet of a fuel cell, the method comprising:
 - (a) providing a filter assembly comprising a particulate filter and a chemical filter comprising a first carbon absorbent adsorbent material and a second carbon adsorbent material, each of the particulate filter and the chemical filter having an inlet and an outlet the particulate filter being downstream of the chemical filter;
 - (b) passing a dirty gas stream into the inlet of through each of the particulate filter and the chemical filter to remove contaminants from the dirty gas stream to provide a cleaned gas stream; and

Serial No. 10/696,442 Amendment dated April 27, 2005 Reply to Office Action of Feb. 18, 2005

- (c) providing the cleaned gas stream to the gas inlet of the fuel cell.
- 21. (currently amended) The method according to claim 20, wherein the <u>first</u> carbon absorbent <u>adsorbent material and the second carbon adsorbent</u> material comprises impregnated carbon absorbent material.
- 22. (currently amended) The method according to claim 20, wherein 21, further comprising:
 - the first carbon adsorbent material has providing the impregnated carbon material with an acidic surface constructed and arranged to remove a basic contaminant, the basic contaminant being selected from the group consisting of ammonia, amines, amides, sodium hydroxides, lithium hydroxides, potassium hydroxides, volatile organic bases and nonvolatile organic bases.
- 23. (currently amended) The method according to claim 20, wherein 21, further comprising:
 - (a) the second carbon adsorbent material has providing the impregnated carbon material with a basic surface constructed and arranged to remove an acidic contaminant, the acidic contaminant being selected from the group consisting of sulfur oxides, nitrogen oxides, hydrogen sulfide, hydrogen chloride, and volatile organic acids and nonvolatile organic acids.
- 24. (currently amended) The method according to claim 20, wherein the carbon absorbent adsorbent material comprises extruded carbon absorbent material.
- 25. (new) The fuel cell system according to claim 1, wherein the particulate filter is a HEPA filter.
- 26. (new) The filter assembly according to claim 12, wherein the particulate filter is a HEPA filter.